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Wißmar, 30.10.1978

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Electronic family planning aid

Family planning using deliberate conception control is currently an important issue. Various methods are available for this. A simple technique which has no side effects is the rhythm method. Although this technique is not as reliable as other methods of contraception, it allows childless couples to have a restrictive influence on the probability of conception.

To use this rhythm method, diligent operation of a menstruation calendar is necessary in order to determine the days favouring conception on the basis of a simple formula. Such a calendar provides revealing information on the female cycle, so that any irregularities will suggest initial assumptions as to the onset of a pregnancy or an illness in the woman.

To operate such a calendar, forms are available which are to be used for entering the start of a cycle and contain advice on calculating the days favouring conception from the average length of a plurality of cycles. If the menstruation calendar is not kept on a regular basis, the dates determined from it are very unreliable.

Electronic computing equipment is used for diverse medical applications. Its use in the consumer field is not yet customary today on account of the high costs. On the other hand, electronic computing equipment, e.g. microprocessors, is used at low cost to simplify the operation of consumer articles.

It is now self-evident that the rhythm method of family planning can be simplified using computing equipment.

A commercially available electric alarm clock, e.g. a clock radio with automatic date display, which can also be produced using the actual microprocessor described below, is connected to a microprocessor module (1). Besides the customary control elements (3) for time of day, date and wake-up time, this arrangement has an additional switch (7) which is actuated by the woman at the start of her period. The switch does not need to be actuated if the cycle data is supplied to the computing system in another way. The date of the start of the cycle is stored by the microprocessor in a non-volatile memory (INTEL DATA CATALOG 78). To prevent incorrect operation, the dates established previously for the start of the cycle are used to calculate the probable start of the next cycle, and the input key (7) is enabled a short time before this next cycle starts. A signal lamp (5) indicates when the key is enabled. After it has been actuated, this key is disabled until the next date which is to be expected. An additional, concealed switching element (4) enables corrections to be made in the event of irregularities in the cycle.

The microprocessor uses the available data for the start of the cycle to calculate the days favouring conception, and signals these using a signal lamp (6). The program in the microprocessor is designed to take into account the uncertainty arising when there are fluctuations in the period sufficiently accurately. The probability of conception can be shown, possibly numerically, on a display (2).

Patent Claims

1. Equipment for automatically showing a woman's fertile days, characterized in that it contains
5 at least one input device for the start of a cycle and at least one display device for the days favouring conception.

2. Equipment according to Claim 1, characterized in that it has computing equipment with a
10 non-volatile memory which permanently stores the times of the start of a cycle.

3. Equipment according to Claim 1, characterized in that the input device provided is a key which can only be operated over a predetermined
15 period of time and which, after it has been operated, is disabled until the next period of time.

4. Equipment according to Claim 1, characterized in that the key's availability for input is displayed.

20 5. Equipment according to Claim 1, characterized in that the times at which the key is actuated are permanently recorded in a non-volatile memory.

25 6. Equipment according to Claim 1, characterized in that there is at least one display device which signals the days favouring conception.

7. Equipment according to Claim 1, characterized in that the probability of conception can be displayed numerically.